

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086  
(For candidates admitted during the academic year 2008-09 & thereafter)

SUBJECT CODE: BT/AC/GB13

B. Sc. DEGREE EXAMINATION, NOVEMBER 2008  
BRANCH VI (a) – ADVANCE ZOOLOGY AND BIOTECHNOLOGY  
FIRST SEMESTER

COURSE : ALLIED – CORE  
PAPER : GENERAL BOTANY-I  
TIME : 2 ½ HOURS  
MAX.MARKS:100

SECTION – A

ANSWER ALL QUESTIONS ( 20 x 1 = 20)

I. FILL IN THE BLANKS ( 5 x 1 = 5 )

1. Arecaceae belongs to the series \_\_\_\_\_.
2. The fruit of cucurbitaceae is a \_\_\_\_\_.
3. The sexual fruit body of *Aspergillus* is a \_\_\_\_\_.
4. Inverted cortical bundles are seen in \_\_\_\_\_.
5. *Sargassum* belongs to the order \_\_\_\_\_.

II. MATCH THE FOLLOWING ( 5 x 1 = 5 )

- |                   |   |                  |
|-------------------|---|------------------|
| 6. Milky latex    | - | substrate        |
| 7. Closed bundle  | - | <i>Polyporus</i> |
| 8. Conceptacles   | - | root             |
| 9. Straw          | - | <i>Sargassum</i> |
| 10. Bracket fungi | - | Apocynaceae      |

III. ANSWER TRUE OR FALSE ( 5 x 1 = 5 )

11. Cucurbitaceae possess tendrils
12. Cambium has fusiform and ray initials.
13. Apothecium is an ascocarp.
14. *Nostoc* belongs to red alga.
15. Amaranthaceae belongs to Monochlamydeae.

IV. CHOOSE THE CORRECT ANSWER ( 5 x 1 = 5 )

16. Hooded anthers are characteristic of  
a) Fabaceae b) Cucurbitaceae c) Annonaceae d) Orchidaceae
17. In *Areca* the edible part is  
a) The fruit b) seed c) cotyledon d) endosperm
18. Which one of the following belongs to Ascomycetes?  
a) *Aspergillus* b) *Pilobolus* c) *Albugo* d) *Synchytrium*
19. A marine brown alga.  
a) *Sargassum* b) *Chara* c) *Cladophora* d) *Caulerpa*
20. After secondary growth the tissue present opposite the protoxylem is the  
a) Medullary ray b) cork cambium c) vessel d) Phloem

**V. WRITE IN 30 WORDS. ANSWER ANY 6 OF THE FOLLOWING**  
(6 x 3 = 18)

21. Bilabiate corolla
22. Collateral bundle
23. Heterocyst
24. Hymenium
25. Spawn
26. Androecium of Apocynaceae.
27. Coenocytic hypha
28. Vascular cambium
29. Anisogamy

**SECTION – B**

**ANSWER ANY FOUR QUESTIONS. EACH ANSWER NOT TO EXCEED 200 WORDS.**  
(4 x 8 = 32)

30. Give the diagnostic features of Annonaceae with diagrams.
31. Explain secondary growth in a dicot root.
32. Write the steps involved in the cultivation of edible mushroom.
33. If you are given a *Ficus* plant how will you make the plant a dwarf?
34. Bring out the structure of thallus of *Chara*.
35. Write the stages of the *zygospore* formation in *Rhizopus*.

**SECTION – C**

**ANSWER ANY TWO QUESTIONS. EACH ANSWER NOT TO EXCEED 1000 WORDS.**  
(2 x 15 = 30)

36. Explain the life cycle of *Aspergillus*.
37. Give the outline of the classification of Bentham & Hooker and write its merits and demerits.
38. Explain anomalous secondary growth as seen in *Boerhaavia*.
39. Write about sexual reproduction in *Sargassum*.

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